(54) Title: METHOD OF ESTIMATING THE ILLUMINATION FOLD IN THE MIGRATED DOMAIN
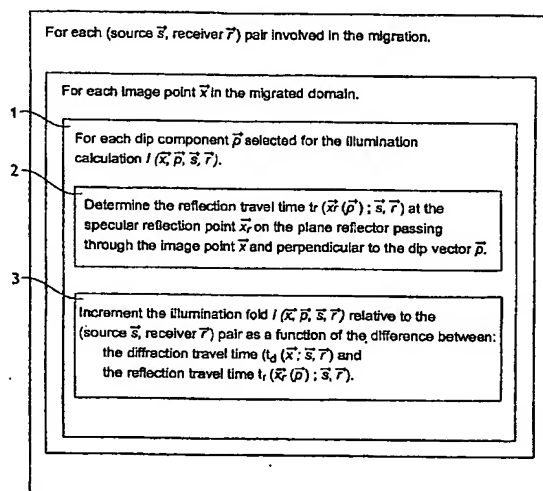
(57) Abstract: The invention relates to an estimate of the seismic illumination fold (x,p) in the migrated 3D domain at an image point x, for a dip of vector p characterised in that the illumination fold I (z, p; s, r) is estimated for each (source s, receiver r) pair in the seismic survey, by applying the following steps: - determination of the reflection travel time t_r (.x_r (p) ; s , r)from the source s to the specular reflection point z, on the plane reflector passing through the image point x and perpendicular to the dip vector p, and then return to the reflector r; starting from the diffraction travel time t_d(.z;s, r) from the source to the said image point x and then return to the reflector r; - incrementing the said illumination fold I (X, p;s, r) related to the said (source s, receiver r) pair as a function of the difference between the diffraction travel time t_d (x; s, r) and the reflection travel time $tr(xr (p)isrr)$.